

## CLAIMS

### What is claimed is:

1. An apparatus, comprising:
  - an encoder to receive and to encode a data word, wherein a power spectral density of an encoded word is to be lowered across a specific frequency band relative to a power spectral density of the data word;
  - a data transmission bus coupled with the encoder to receive the encoded word, wherein a clock frequency of the data transmission bus is selected based on the specific frequency band; and
  - a decoder coupled with the data transmission bus to receive and to decode the encoded word wherein the data word is to be obtained from the encoded word.
2. The apparatus of claim 1, wherein the encoder to cause transitions within the encoded word at a rate equivalent to a bandwidth to be protected.
3. The apparatus of claim 1, wherein the encoder to substantially balance a weight of the encoded word.
4. The apparatus of claim 1, wherein the encoder to substantially balance a weight of at least two consecutive encoded words.

5. The apparatus of claim 1, wherein the clock frequency of the data transmission bus is selected to cause a null in a power spectrum of bits transmitted on the data transmission bus to overlap with a wireless network frequency.

6. The apparatus of claim 5, wherein the specific frequency band is substantially equal to a wireless network frequency band.

7. The apparatus of claim 5, wherein a reciprocal of a bit period is set to fall within the specific frequency band selected from the group consisting of 1.7 to 1.8 gigahertz, 1.8 to 1.9 gigahertz, and 2.4 to 2.5 gigahertz.

8. The apparatus of claim 1, wherein the clock frequency of the data transmission bus is selected to place the specific frequency band proximate to a wireless network frequency band.

9. The apparatus of claim 8, wherein the specific frequency band is substantially equal to a wireless network frequency band.

10. The apparatus of claim 8, wherein a reciprocal of a bit period is set to fall within the specific frequency band selected from the group consisting of 1.7 to 1.8 gigahertz, 1.8 to 1.9 gigahertz, and 2.4 to 2.5 gigahertz.

11. An apparatus, comprising:

an encoder to receive and to encode a first data word, wherein a power spectral density of a first encoded word is to be lowered across a specific frequency band relative to a power spectral density of the first data word;

a data transmission bus coupled with the encoder to receive the first encoded word, wherein a clock frequency of the data transmission bus is selected based on the specific frequency band; and

a decoder coupled with the data transmission bus to receive and to decode a second encoded word wherein a second data word is to be obtained from the second encoded word.

12. The apparatus of claim 11, wherein the encoder to substantially balance a weight of the first encoded word.

13. The apparatus of claim 11, wherein the clock frequency of the data transmission bus is selected to cause a null in a power spectrum of bits transmitted on the data transmission bus to overlap with a wireless network frequency.

14. The apparatus of claim 11, wherein the clock frequency of the data transmission bus is selected to place the specific frequency band proximate to a wireless network frequency band.

15. An apparatus, comprising:

an encoder to receive and to encode a data word, wherein a power spectral density of an encoded word is to be lowered across a specific frequency band relative to a power spectral density of the data word and a clock frequency of a data transmission bus, to receive the encoded word, is selected based on the specific frequency band.

16. The apparatus of claim 15, wherein the encoder to substantially balance a weight of the encoded word.

17. The apparatus of claim 15, wherein the clock frequency of the data transmission bus is selected to cause a null in a power spectrum of bits transmitted on the data transmission bus to overlap with a wireless network frequency.

18. The apparatus of claim 15, wherein the clock frequency of the data transmission bus is selected to place the specific frequency band proximate to a wireless network frequency band.

19. An apparatus, comprising:

a decoder to receive and to decode an encoded word to obtain a data word from the encoded word, wherein a power spectral density of the encoded word is to be lowered across a specific frequency band relative to a power

spectral density of the data word and a clock frequency of a data transmission bus, to receive the encoded word, is selected based on the specific frequency band.

20. The apparatus of claim 19, wherein the encoder to substantially balance a weight of the encoded word.

21. The apparatus of claim 19, wherein the clock frequency of the data transmission bus is selected to cause a null in a power spectrum of bits transmitted on the data transmission bus to overlap with a wireless network frequency.

22. The apparatus of claim 19, wherein the clock frequency of the data transmission bus is selected to place the specific frequency band proximate to a wireless network frequency band.

23. An apparatus comprising:

a processor;

a data transmission bus wherein a clock frequency of the data transmission bus is selected based on a specific frequency band;

a memory to communicate with the processor;

an encoder coupled with the data transmission bus, to receive and to encode a data word, wherein a power spectral density of an encoded word is to

be lowered across the specific frequency band relative to a power spectral density of the data word; and

a decoder coupled with the data transmission bus to receive and to decode the encoded word wherein the data word is to be obtained from the encoded word.

24. The apparatus of claim 23, wherein the encoder to cause transitions within the encoded word at a rate equivalent to a bandwidth to be protected.

25. A method comprising:

encoding a data word, wherein a power spectral density of an encoded word is lowered across a specific frequency band;

transmitting the encoded word on a data transmission bus, wherein a clock frequency of the data transmission bus is selected to place the specific frequency band proximate to a wireless network frequency band; and

decoding the encoded word, received from the data transmission bus, wherein the data word is obtained from the encoded word.

26. The method of claim 25, wherein the encoding causes transitions within the encoded word at a rate equivalent to a bandwidth to be protected.

27. The method of claim 25, wherein the encoding the data word substantially balances a weight of the encoded word.

28. The method of claim 25, wherein the encoding the data word substantially balances a weight of at least two consecutive encoded words.

29. The method of claim 25, wherein the specific frequency band is substantially equal to a wireless network frequency band.

30. The method of claim 25, wherein a reciprocal of a bit period is set to fall within the specific frequency band selected from the group consisting of 1.7 to 1.8 gigahertz, 1.8 to 1.9 gigahertz, and 2.4 to 2.5 gigahertz.

31. A computer readable medium containing executable computer program instructions, which when executed by a data processing system, cause the data processing system to perform a method comprising:

encoding a data word, wherein a power spectral density of an encoded word is lowered across a specific frequency band;

transmitting the encoded word on a data transmission bus wherein a clock frequency of the data transmission bus is selected to cause a null in a power spectrum of bits transmitted on the data transmission bus to overlap with a wireless network frequency; and

decoding the encoded word, received from the data transmission bus, wherein the data word is obtained from the encoded word.

32. The computer readable medium as set forth in claim 31, wherein the encoder causes transitions within the encoded word at a rate equivalent to a bandwidth to be protected.

33. The computer readable medium as set forth in claim 31, wherein the encoding the data word substantially balances a weight of the encoded word.

34. The computer readable medium as set forth in claim 31, wherein the encoding the data word substantially balances a weight of at least two consecutive encoded words.

35. The computer readable medium as set forth in claim 31, wherein the specific frequency band is substantially equal to a wireless network frequency band.

36. The computer readable medium as set forth in claim 31, wherein a reciprocal of a bit period is set to fall within the specific frequency band selected from the group consisting of 1.7 to 1.8 gigahertz, 1.8 to 1.9 gigahertz, and 2.4 to 2.5 gigahertz.

37. An apparatus to process data comprising:  
a means for lowering a power spectral density of a data word across a frequency band;



a means for transmitting the data word; and

a means for recovering the data word after transmission of the data word.

38. Said apparatus of claim 37, wherein said means for lowering, lowers a power spectral density of at least two consecutive data words.